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THE STONECUTTERS' UNION AND THE STONE-PLANER

I

Machines for planing stone have been used for many years. The original machines were simply iron-planers slightly reconstructed, and were worked by a gear-and-rack drive. They were successful in planing flaggings and other paving material for which a smooth surface was not required, but could not be used on building material. About 1880 a new type of planer was designed, in which a screw was substituted for the gear-and-rack drive. A regular motion was thus attained, and the machine became a practicable means of working building stone. It was possible, not only to plane stone on the machine, but also by the use of various forms of edges to cut moldings of any ordinary design. A large part of this work had formerly been done by skilled stonemasons using chisel and hammer. The planer, however, by no means entirely replaced the stonemason. It was still necessary to employ stonemasons to do much that the machine could not do. Also, it was cheaper to do small pieces by hand than to mount them on the planer.

The new planers were introduced almost simultaneously in the Bedford limestone district, in the New York bluestone region, and in New York City. Planers were not much used, however, until about 1895; from 1895 to 1900 they were rapidly introduced in the

Bedford limestone region, and since 1900 they have become a necessary part of stone-working equipment in all parts of the United States. The great increase since 1895 in the use of the planer on building stone is closely connected with the rapid development of the Bedford limestone industry.¹ Planers are now used on all varieties of building stone except granite and some kinds of sandstone; but they were first extensively employed on Bedford limestone, and are still most advantageously employed on that material.

The widening use of Bedford limestone as a building material made it desirable for stone contractors to keep in stock quantities of unfinished Bedford limestone. Wherever a contractor was cutting a large amount of this material he found it profitable to instal a planer. On the other hand, when a large building was to be erected, it was frequently more economical to have the stone prepared as far as possible at or near the quarries. There were thus two distinct fields for the use of the planer: first, at or near the quarries,² and, second, in local stoneyards.

When the planers were first introduced much was said about the injury they did to the stone, and it was asserted that planed stone soon disintegrated.³ The strong desire of some of the workmen to discredit the machines induced them to exaggerate the injury done.⁴ A writer in the *Stone Cutters' Journal* for March,

¹ From 1900 to 1910, the value of the annual quarry output of Bedford limestone increased from \$1,639,985 to \$3,106,520, although in the same period the production of building stone in the United States, exclusive of granite, increased only from \$7,439,000, to \$10,506,543 (*Mineral Resources of the United States*, Part II, 1910, pp. 645, 649, 673).

² In 1909 there were eighty-four planers in the Bedford district (J. A. Udden, "The Oölitic Limestone Industry at Bedford and Bloomington, Indiana," in *Bulletin 430, U.S. Geological Survey*).

³ See *Stone*, September and October, 1898.

⁴ See, for example, a letter in the *Stone Cutters' Journal*, November, 1903, p. 10, in which the writer, the secretary of a local stonemasons' union, naïvely says: "Speaking about machine-cut stone reminds me that recently I read that a building in some part of Pennsylvania was crumbling or wasting so fast that oil of some kind was used on its face to preserve it. I think a southern stone was used from Florida. If we could ascertain that it was cut by machinery, what a splendid lever we would have in condemning cut stone."

1893, declared that the surface of planed stone rotted and the projections fell off. It has long been understood in the trade that planer-cut stone is fully as durable as that cut by hand if the planing is properly done, but that the planer may be made to run so deep as to "bruise" the stone.

The first planers were slow and required a large amount of power, but they were soon much improved in both respects by changes in the form of the drive. The early screw drive has been gradually replaced by a worm or a spiral drive. The newer forms of the machine save from 50 to 60 per cent in power, and attain a much higher speed. The efficiency of the planer has also been increased by various modifications in its form. Since about 1900 planers have been made with a divisible bed, by means of which the output of a planer on small blocks is doubled. Two planermen must be employed, but the overhead charges are cut in half. More recently, also, planers have been introduced which will cut stone of circular form.

The amount of labor saved by the use of a planer is difficult to estimate, since the advantage over handwork is largely relative to the class of stone and the kind of cutting. A single-platen planer of improved type when engaged on the work in which the planer is most superior to handwork will do about as much work in an hour as ten stonemasons. The number of planers in use on building stone in the United States in 1915 was about 1,000.¹ Each of these probably does, on an average, an amount of work which would require seven or eight stonemasons. The stone-planers now in operation in the United States on building stone, therefore, do an amount of work which would require seven or eight thousand hand cutters.

Such statistical data as are available² indicate that the saving of labor made by the planer has not been offset by any increase in

¹ It is impossible to ascertain exactly the number of planers manufactured, since the machines are made by a number of manufacturers and the records of some of these are not available. The estimate made here is based on data supplied by the more important makers.

² The Census of Occupations lumps together stone-cutters, granite-cutters, and interior-marble cutters. In 1900, there were 54,460 "stonemasons" in the United States; in 1910, the number was 35,737. The Census warns, however, that these figures are not comparable.

the production of stone, and that therefore the displacement of labor has been equal to the amount of labor saved. The reports of the United States Geological Survey on the production of stone estimate as follows the value of the exterior building stone, other than granite, produced in the United States:¹

1900.....	\$ 7,400,000
1905.....	12,900,000
1910.....	10,200,000
1913.....	8,274,786
1914.....	8,848,234

In the later years, a much larger part of the stone has been finished at the quarries, and such stone has a higher value. The amount of exterior building stone produced is, therefore, probably less at present than in 1900.

As in the case of all inventions of labor-saving machinery, except where monopolized, the planer has brought substantial reductions in the price of the commodity. In the late eighties Bedford stone was set in Chicago at \$1.85 per cubic foot. In 1913, the price was \$1.12½. Similar reductions have been made in the price of marble and of those sandstones which can be cut by the planer. That these reductions did not lead to an increased use of stone has been due to the active competition of concrete and terra cotta as building materials. Concrete rivals stone chiefly as material for bridges. The increasing use of terra cotta is largely due to the cheapness with which a scheme of building decoration in which the same ornament is repeated a number of times can be executed in terra cotta. The inroads made by terra cotta and concrete, within the past fifteen years, upon the field hitherto regarded as pre-empted by stone would have been greater if a reduction in the cost of cut stone had not been made possible by the introduction of the planer.

In the period since 1900 the use of other labor-saving devices besides the planer has been extended in the stone trade. Pneumatic tools and diamond-pointed saws have taken over much of the stonemason's work. It may be roughly estimated that in 1900 there were between 20,000 and 25,000 stonemasons in the United

¹ *Mineral Resources of the United States, passim.*

States. The labor-saving devices now in use in the trade, the greater part of which have been introduced since 1900, do an amount of work which, at the lowest estimate, would require the labor of 10,000 hand cutters.¹

II

The workmen engaged in cutting marble, limestone, and sandstone for use in the exterior of buildings are known as stonecutters, or sometimes, to distinguish them from the granite-cutters, as soft-stone cutters or freestone cutters. Besides the stonecutters, workmen of one other trade, the marble-cutters, who are employed in cutting and finishing stone intended for interior decoration, have been displaced by the planer. But the marble-cutters are a relatively small and poorly organized group, and have never adopted any definite policy with regard to the operation of the planers. In studying trade-union policy with reference to the introduction of the planer it will be possible, therefore, to confine attention to the stonecutters.

The stonecutters were one of the first trades in the United States to organize a national union. Copies of an official journal of the Journeymen Stone Cutters' Association of the United States of America, with dates as early as 1853, are extant. But the national unions of the stonecutters have always been decentralized in structure. As a result, one after another has gone to pieces. The present national union—the Journeymen Stone Cutters' Association of North America, ordinarily known as the General Union, or more briefly as the G.U.—was organized in 1888.

In considering the policy of the stonecutters with reference to the planer, the weakness of the national union must always be borne in mind. The governing body of the General Union, between conventions held at irregular intervals, is an executive board, which is called together only in grave emergencies. The only beneficiary feature of the national union is a death benefit of from \$50 to \$150, according to length of membership. Until 1913 strike benefits were paid only after being voted upon by the branches. The

¹ A competent authority informs the writer that the number of stonecutters in New York and its vicinity in 1900 was 2,100 and in 1910, 1,000.

annual dues of the national union until 1913 were only twenty-five cents per month, and in any considerable strike the funds were soon exhausted. The local organizations of stonecutters have frequently severed their connection with the national union, which has been powerless to restrain them. It has indeed been the rule rather than the exception for the local bodies in the largest cities to maintain their independence of the General Union.¹

Until 1895 the stonecutters did not concern themselves about the planer. The number of planers in use was small, and they were to be found chiefly at the quarries, where the stonecutters were either unorganized or organized in independent local unions. The first impulse to the formulation of a national policy was given by the attempts first to control and later to prohibit the use of the planer, inaugurated in 1895 by the Chicago local union of stonecutters.

The use of planers in Chicago began about 1892. The local union in 1895 asked unsuccessfully for the insertion in the agreement with the Chicago cut-stone contractors of provisions limiting the hours during which the machines were to be operated, and requiring that the planers should be operated by union men. In January, 1896, the union insisted that the planers should not run more than eight hours a day, and a strike ensued.² The strike was settled by an agreement made on April 15. The planers were to be operated only eight hours per day and six days per week, and the laborers employed as planermen were to be replaced, in part immediately, and by degrees entirely, with stonecutters. The union in return agreed not to work on any stone which had been planed outside of Chicago, and "to keep out all stonework not planed or cut in Chicago."³

¹ Among the stonecutters an unaffiliated local organization is referred to as a "local union," while an affiliated organization is known as a "branch."

² See Bogart, "The Chicago Building Trades Dispute," in Commons, *Trade Unionism and Labor Problems*, p. 110; testimony of J. Sullivan, chairman of Chicago Stone Cutters' Union, in *Report of the Industrial Commission*, VIII, 447; of Professor Graham Taylor, *ibid.*, 542; of Mr. G. P. Gubbins, *ibid.*, 221; *Special Report of the Commissioner of Labor on Regulation and Restriction of Output*, p. 350.

³ See *Stone Cutters' Journal*, June, 1899, pp. 2, 11, 13; testimony of Henry Struble, in *Report of the Industrial Commission*, VIII, 356, and of J. Sullivan, *ibid.*, 447.

In 1898 the Chicago union demanded that for every planer operated the contractor should employ at least four stonecutters with hammer and chisel. The actual proportion in most of the yards was far below this, and the contractors refused to accede. After a strike of ten weeks a compromise was effected under which the contractors agreed to employ two stonecutters for every single planer and four stonecutters for every double planer. In January, 1899, the union notified the contractors that they would not work after April 1 in any yard where machinery, except saws and rubbing beds, was used. The contractors secured an extension of time to June 1, but on that date all the planers in Chicago stopped. The value of the machinery thrown out of use was estimated at over \$100,000. Planers were not used in Chicago from June 1, 1899, until after the building-trades strike of 1900.

The gradual development of a machine policy in Chicago was naturally a matter of profound interest to the branches of the General Union, although the Chicago union was an independent organization. At each stage in the struggle against the planer the Chicago union set forth its aims in letters to the *Stone Cutters' Journal*, the official organ of the General Union,¹ and urged the inauguration of a general campaign against the planer. Editorials commending the course of the Chicago union appeared frequently in the *Journal*.² A number of branches of the General Union followed the example of the Chicago union in imposing restrictions on the operation of the planer. Thus in March, 1896, the Fort Wayne, Indiana, branch struck to limit the hours the planer might be worked and to require the employment of a stonecutter as planerman. In July, 1899, the Scranton branch forced the employment of stonecutters as planermen. In August, 1899, the St. Louis branch demanded that planers should not be run

¹ See, for example, *Stone Cutters' Journal*, February, 1896, pp. 2, 13; May, 1899, p. 15; June, 1899, p. 15; July, 1899, p. 11.

² See, for instance, *Stone Cutters' Journal*, May, 1896, p. 2; June, 1899, p. 2. In the issue of June, 1899, an editorial concluded as follows: "The planers are gone and we are glad; also that Chicago was the union that accomplished it. The men in Chicago are entitled to a world of credit for their aggressiveness and progressiveness. Chicago stonecutters have the honor to be the first union to secure the eight-hour day, the Saturday half-holiday, and now the abolition of the planer."

after October 1. The New York local union in 1901 required the employment of five hand cutters for each planer.

During the period from 1896 to 1900 a beginning was also made by the local organizations in another form of restriction: the prohibition of the shipment of planer-cut stone into cities where the local union was opposed to its use. Restriction on the shipment of hand-cut stone had long been enforced by the stonemasons. The earliest constitution of the General Union contained the following rule: "This Association will not countenance the transportation of cut stone from one place to another unless the wages and hours are equal; except in such cases where the interchange of work between two branches is mutually agreeable without regard to wages or hours."¹ The purpose of this provision was to prevent the competition of branches with low wage scales and inferior working conditions. In certain of the larger places, notably New York and Chicago, by agreements between the stonemasons' unions and the contractors, the shipment of cut stone into the city had been entirely interdicted, without regard as to whether wages and hours were lower in the shipping branch.

Planer-cut stone had been excluded from some localities on the ground that the working conditions at the shipping-point were inferior to those at the place of erection, but about 1896 a number of branches in which there were no planers began to exclude all planer-cut stone. In March, 1897, for instance, the Columbus, Ohio, branch decided not to permit any cut or planed stone to be shipped into Columbus. In 1899 a considerable quantity of marble was cut and planed at Tate, Georgia, for use in a Chicago building. The Chicago union refused to work on this marble, and by the aid of the Building Trades Council was able to secure its exclusion.² The Chicago local union also complained to the executive board of the General Union. The board was unanimous in holding that it was highly desirable that planed stone should not be shipped into cities where the planer was not in use, but realized that the rule of the General Union concerning the shipment of stone did not cover the case.³

¹ *Constitution and By-Laws of the Journeymen Stone Cutters' Association of North America, 1892*, Art. XIII.

² See testimony of F. P. Bagley, in *Report of the Industrial Commission*, VIII, 390.

³ *Stone Cutters' Journal*, September, 1899, pp. 9, 11; October, 1899, p. 11.

III

The opposition to the planer increased so rapidly that in January, 1900, the executive board of the General Union was called into session. As a result of their deliberations, the members of the board determined to add to the constitution of the General Union two new rules: (1) "Planer work will not be permitted to be shipped into any city where the union has succeeded in abolishing them"; (2) "Branches shall make every effort possible to prevent the introduction of planers in their jurisdiction."¹

Certain members of the board felt that these rules were insufficient to meet the situation, and proposed a rule forbidding any member of the union to work in a shop where a planer was in use, but the majority felt that so drastic a rule could not be enforced.

Of the two new rules adopted, the rule restricting the shipment of planer-cut stone was far the more important. It was modified from time to time, but remained in force from 1900 until 1908. It will be convenient, therefore, to neglect the strict chronology of events and, before taking account of other rules relating to the planer, to trace the operation of this rule through its entire history.

The adoption of the rule against the shipment of planer-cut stone was a popular measure, not merely because it promised to check the displacement of hand cutters, but also because it was in accord with the view that the stonemasons in each place should do the stonemasonry of that place. The shipment of stone ready to go into the building had been greatly increased by the introduction of the planer, since the cutting could, in many cases, be done more cheaply at the shipping-points.

For the enforcement of the rule, the union relied chiefly on the co-operation of the branches at the shipping-points.² These branches were expected at least to refuse to do the necessary hand-work on planed stone intended for places in which there were no planers, even if they did not go the length of striking against the planing of the stone. The branches at the place of erection would, of course, refuse to finish stone worked on the planers. The

¹ *Stone Cutter's Journal*, February, 1900, Supplement, p. 15.

² Strictly construed, the rule only protected those cities which had succeeded in abolishing planers; but the executive board held that the rule also applied to cities in which planers had never been in use (*Stone Cutters' Journal*, March, 1901, pp. 5-8).

union also placed some reliance on the fact that in certain places its members had control of the setting of stone. These workmen could be counted upon to refuse to set planed stone. The aid of the contractors was also hoped for. It was believed that the agreements in Chicago and New York which excluded cut stone showed that the contractors favored a policy of local protection. This would be the case particularly, it was thought, in those cities in which the contractors had no planers.

The co-operation of the shipping branches was given only grudgingly and partially. The self-interest of these branches led them to finish planer-cut stone intended for shipment unless it was clear that they would thereby involve themselves in difficulties with the General Union. As a result, the pages of the *Stone Cutters' Journal* from 1900 to 1908 teem with the accusations and the rejoinders of the branches. In March, 1901, for instance, the branch at Syracuse, New York, complained that planer-cut stone was being shipped to Syracuse from Gouverneur, New York. The Gouverneur branch replied that it had not known where the stone was to be used and that the work was finished. This form of defense was frequently used by the branches at the shipping-points. The branch at the place of erection, therefore, was forced to find out for itself where the work was being done, and usually by the time it had this information the branch at the shipping-point announced regretfully that the work was completed. Even where the branch at the shipping-point was willing to co-operate in preventing a shipment the contractor was frequently able to conceal the destination of the stone.

The reliance of the stonemasons on their control of setting proved equally unwarranted. For many years there had been a dispute between the bricklayers and masons and the stonemasons over the control of the setting of stone. In cities where the work was in the hands of the stonemasons, the masons usually saw in the refusal of the stonemasons to set planed stone an opportunity to gain what they regarded as their rights. Here and there a branch was able to put pressure on the masons through the local building-trades council, but the local unions of the bricklayers and masons are not ordinarily affiliated with the building-trades councils. In

places where the masons had jurisdiction over stone setting, it was rarely that they could be induced to refuse to set stone merely because it had been shipped in against the rule of the stonecutters.

The expectation that local contractors could aid in keeping out planer-cut stone was quickly shown to be delusive. A contractor no longer required a stoneyard and equipment, since he could have the stone planed and cut at the quarries. The field of competition was thus greatly widened. Contracting firms with equipment at the quarry now took contracts over a large territory. The local contractors in some places undoubtedly would have been glad to see all the stonework of the locality done in their yards and by hand, but they realized that this form of local protection was impracticable.

A pronounced difference of opinion between the branches at the shipping- and the receiving-points as to the propriety of restricting the shipment of planer-cut stone soon became evident. In spirited protests the branches at Albion and Gouverneur, important shipping-points, declared that any attempt to stop the use of machinery was futile, and that they had a right to cut stone no matter where it was to be used, provided they received the same wages and worked the same number of hours. The executive board of the General Union refused for some years to grant a charter to the unaffiliated Bedford union, on the ground that the union did not co-operate in preventing the shipment of planer-cut stone into places where there were no planers.

The difficulties in the enforcement of the rule and the growing bitterness of feeling between the receiving and the shipping branches led the president of the General Union to call a national convention to meet on December 5, 1902, to consider the planer question. The advocates of restriction were greatly in the majority, and a new rule with reference to the shipment of stone was adopted. It read as follows: "This association will not countenance the transportation of cut stone from one place to another where the interchange of work is not mutually agreeable."¹

This rule gave the branches complete local autonomy in the regulation of shipments. Even branches in which planers were

¹ *Constitution, 1903, Art. XII, sec. 1.*

in operation might now shut out planer-cut stone, merely because they wished to retain the work for their own members. Despite the strenuous opposition of the shipping branches, the rule was ratified by the branches by a vote of 145 to 103.

Under the new rule a considerable number of branches asked permission from the General Union to extend their jurisdiction over adjacent territory, in order to secure a wider monopoly for local hand-cut stone. The Louisville and New Albany branches became involved in a squabble as to which had jurisdiction over Jeffersonville, Indiana. There were planers in Louisville, but none in New Albany. The Evansville branch asked jurisdiction over Henderson, Kentucky, in order to shut out planer-cut stone from Louisville. Although the shipment of stone was not effectively checked, the branches were constantly involved in difficulties with each other over the shipments. The New Haven branch, for instance, attempted to fine members of the Springfield branch who were cutting stone for use in New Haven.

The dissatisfaction of the shipping branches constantly increased. In June, 1904, a vote on the question of excluding cut stone was demanded by a number of branches and it was finally decided to hold another convention at St. Louis in September, 1904. After much discussion and a bitter exchange of views between the representatives of the shipping branches and of the non-planer branches, the rule was remodeled by a vote of 129 to 84 to read as follows:

This association will not countenance the transportation of cut stone from one place to another where the interchange of work is not mutually agreeable, except from branches where planers are operated by stonemasons and where wages and hours are equal at the time the contract was let. But in no case shall planer-cut stone be shipped into the jurisdiction of any branch that has succeeded in keeping the planers out of their jurisdiction.¹

The new rule was substantially similar to the rule as it had stood prior to 1902, in that it permitted shipment into towns where planers were in operation and prohibited shipment into towns where there were no planers. The only important difference was in requiring as a condition of shipment the employment of stonemasons as planermen. The rule of 1904 was no more effective than

¹ *Constitution, 1905*, Art XII, sec. 4.

the older rules had been, and in desperation the non-planer branches resorted to a new means of enforcement—the fining of contractors who shipped in cut stone. In October, 1905, the Memphis branch, for instance, fined a Cincinnati contractor \$500 for bringing planer-cut stone into Memphis. The executive board of the General Union decided after much hesitation that one branch could not enforce its embargo by fining contractors whose yards were in the jurisdiction of another branch. By this time the executive board and the president of the General Union were convinced that attempts to stop the shipment of planer-cut stone were futile. The rank and file, however, were still in favor of restriction. Another convention of the General Union was held in 1906 and the shipment of planer-cut stone was much discussed, but the rule, although changes were made in its wording, remained the same in substance.

By 1908 the situation had become intolerable. At a convention held in that year sentiment was strongly against the continuance of the restriction on the shipment of planer-cut stone. The majority of the "committee on the transportation of cut stone" recommended that the branches should be forbidden to restrict the shipment of stone, provided wages and hours at the shipping- and the receiving-points were equal. Certain branches, however, notably St. Louis, complained bitterly that they had been able to keep out planer-cut stone and that this rule would force them to allow its introduction. Finally, the convention decided to repeal entirely the rule relating to the transportation of stone, leaving it to each branch to decide whether it would attempt to keep out planer-cut stone. Since the rule of the General Union was repealed, a branch which determined on a policy of exclusion could not expect the aid of the shipping branches. The repeal of the rules relating to the shipment of cut stone was ratified by a branch vote of 957 to 521.

The original policy of the General Union toward the planer, as has been already noted, consisted of two parts: first, restriction of the shipment of planer-cut stone, and, second, opposition to the introduction of planers in places where they were not in use. At

the session of the General Union in 1900, when the first rule against the shipment of planer-cut stone was enacted, the branches were urged to "make every effort possible to prevent the introduction of planers in their jurisdiction." If the rule against the shipment of planer-cut stone could have been enforced, many branches would have struggled vigorously against the introduction of planers. But where it was impracticable to keep out planer-cut stone it was distinctly to the advantage of the branch to have the contractors instal planers, since the members of the branch got what the machine left of the home work and, in many cases, of work for the outside. Under such conditions, therefore, the branches did not oppose the introduction of planers.¹

Even where a union offered opposition, it received no aid from the General Union. The executive board interpreted the rule as advisory and not as mandatory, and refused to pay strike benefits where strikes were called against the introduction of planers. There were, however, some cities even of considerable population in which planers were not used for a long time. In St. Louis, for instance, planers were "abolished" in 1900 and were not installed until recently. The success of the St. Louis branch was due to vigorous support by a strong building-trades council, which made it extremely difficult for contractors to use machine-cut stone. In 1905 the exhortation to branches to prevent the introduction of the planer was replaced by a rule which gave the individual branches the power to "make their own local laws as to whether they will allow the introduction of the planer in their jurisdiction."²

Although the national union at first confined its efforts to limiting the extension of the field of the planer, its policy was soon enlarged by rules relating to the operation of the planer. There were two of these rules: (1) the rule restricting the number of hours a planer might be operated, (2) the requirement that planermen should be stonemasons. A third rule—that a shop must employ

¹ It frequently happened that a branch which one year was strongly in favor of the prohibition of the shipment of planer-cut stone, a year later, after the installation of planers in its jurisdiction, became convinced that the planer was an economic necessity and that any attempt to interfere with shipment was futile.

² *Constitution, 1905*, Art. XII, sec. 5.

a certain number of hand cutters for each planer—was also adopted by a number of branches, although it never attained the dignity of a national rule. The first and third rules were designed, like the rule against the shipment of planer-cut stone and the rule against the introduction of planers, to check the displacement of hand cutters, and it will, therefore, be convenient to consider these two first.

The rule limiting the number of hours that planers might be operated, as has already been noted, was first introduced in 1898 by the Chicago union. The planermen in New York somewhat later adopted a similar rule, presumably at the suggestion of the stonecutters, and a few branches of the General Union followed the example thus set. The convention of the General Union held in 1902 determined to make this regulation general, and inserted the following rule in the constitution: "In no case shall planers be allowed to run or work more than the number of hours per day worked by stonecutters of said branch."¹ The enforcement of this rule was immediately found by most of the branches to be impracticable. In the quarry districts the stone was ordinarily planed at the quarries and cut in shops some distance away. The stonecutters, therefore, could not bring pressure to bear on the owners of the planers. Moreover, it was doubtful whether the rule lessened to any considerable extent the amount of work done by the planers, since, as the Milwaukee branch pointed out, the effect of reducing hours was to increase the number of planers.² The limitation of hours increased the fixed charges of the contractor, but this increase was not sufficient to divert any considerable quantity of work from the machine to the hand workers. It was sufficient, however, to put a contractor in a city where the rule was enforced at a disadvantage as against his competitors in other places. Since each branch was eager to keep down the cost

¹ *Constitution, 1903, Art. XII, sec. 8.*

² *Stone Cutters' Journal*, March, 1904, p. 7. The Chicago union had not found this rule effective in reducing the amount of planer work. In a letter to the *Stone Cutters' Journal*, June, 1899 (p. 13), Mr. Short, secretary of that union, said: "We were out that time [in 1896] thirteen weeks and won our fight, but the victory, glorious though it was, benefited us but little, for the contractors simply put in more planers."

of production of its own contractors in order that they might be able to get contracts, only the most aggressive branches attempted to enforce the rule.

In those places where the branches did make a vigorous effort to limit the hours, they found it nearly everywhere necessary to permit some relaxation of the rule. The employers objected seriously to a rule which fixed a definite and inflexible limit, since the amount of work going to the planers fluctuated greatly. They insisted, therefore, on being allowed to operate their planers with two shifts if the amount of work was sufficient. The San Francisco branch, for instance, allowed a double shift to be used. In 1905 a new rule of the General Union legitimized the use of a double shift in case of necessity.¹ In 1907 the rule was changed from its mandatory form and branches were merely urged to establish an eight-hour limit on the operation of planers, with a double shift in case of necessity.² In 1908 the rule of the General Union was repealed. The matter was thus left to the branches. In most of those branches which had adopted eight-hour rules the pressure of competition soon forced repeal. Planers are ordinarily operated nine or ten hours, with double shifts in busy times, while the stonemasons practically everywhere have an eight-hour day.³

The rule that a specified number of stonemasons should be employed for each planer also made its first appearance, as has been noted, in 1898 in Chicago. It was provided in the Chicago agreement that four hand cutters should be employed for each planer. In New York the local union in 1901 required the employment of five hand cutters for each planerman. The ratio varied considerably from place to place, running as high as ten to one in some places and as low as three to one in others. These rules were more irritating than restricting, since the contractor ordinarily could arrange his work so as to do on the planer all of it that could be done more economically by machinery. There were times,

¹ *Constitution, 1905*, Art. XII, sec. 2. ² *Constitution, 1907*, Art. XII, sec. 2.

³ The average number of hours in the ordinary working week of 144 planermen included in the statistics of wages and hours gathered by the Bureau of Labor in 1907 was 51.69, while the 1,064 stonemasons in the same establishments worked only 45.77 hours (*Bulletin of the Bureau of Labor*, No. 77, p. 50).

however, when the contractor was forced by the rule to give to his hand cutters work which could have been done more cheaply on the machine.

The final part of the policy of the union with reference to the planer was the requirement that planermen should be stonecutters. As early as 1896, as has been noted above, the Chicago union required the gradual replacement of the handy-men employed on the planers by stonecutters. Prior to this time the machines had been manned almost without exception by unskilled laborers who had gradually been trained to be skilled operatives. Until 1902 the General Union was still hopeful that in some way planers might be got rid of, and consequently did not concern itself with the planermen. As it became evident that shipments of planer-cut stone could not be prevented and that the number of planers was increasing, the leaders of the union began to favor a rule requiring that planermen should be stonecutters. It was argued, in the first place, that it would be difficult to enforce any limitation of hours as long as the planers were manned by handy-men. Secondly, it was felt that with the encroachments of the planer it might be necessary to find new fields of employment for stonecutters. Finally, it was contended that the strength of the union would be greatly increased by complete control over all cutting of stone, whether by hand or by machine.

Influenced by these considerations, the convention of 1902 adopted the following rule: "It is the sense of this convention that planers should be operated by members of this organization, and branches are instructed to enforce this law as soon as practicable. . . ."¹ A prime difficulty in carrying out this recommendation was the impracticability of displacing the men already employed as planermen. At the convention held in 1904 the opinion was freely expressed that some provision must be made with reference to these men, but a proposed rule authorizing the executive board to organize them in separate branches of the national union was defeated. The stonecutters were reluctant to admit to membership men who were not skilled hand cutters. Finally the convention passed a rule instructing branches to require the employment

¹ *Constitution, 1903*, Art. XII, sec. 3.

of members on the planers.¹ The new rule became effective on April 1, 1905, and the branches which attempted its enforcement encountered strong opposition from the employers, who were much opposed to replacing men trained to the work with high-paid workmen who were without experience in the operation of the machines. The employers, moreover, feared that the union would use this new power to limit the output of their machines. The executive board of the national union advised a gradual change in places where the planers were operated by handy-men.² A comparatively small number of branches did succeed in enforcing the rule, but these branches for the most part were in places where the number of planers in operation was small.

At the convention held in 1906 the rule requiring the employment of stonecutters as planermen was repealed, and it was decided to admit planermen to membership and to issue them a special card. Members were forbidden to cut, fit, or set stone planed on machines not operated by members of the stonemasons' branches.³ Very few of the branches made any attempt to move in the matter. Most of the branches were reluctant to take handy-men into membership, and the opposition of the employers continued. At the convention of 1908, when all national rules relating to the planer were struck out, it was decided to leave in the constitution the clause permitting the admission of planermen, in order that each branch might use its own discretion in the matter.

In December, 1912, the constitution was again amended to provide for the admission of "all men operating stonecutting machinery." It was proposed that the General Union should organize separate branches of planermen in those places where they were numerous. By this time all hope that the employment only of stonecutters as planermen could be generally secured was lost. The only question was whether planermen should be organized in local unions directly affiliated with the American Federation of Labor, or should be connected with the General Union.⁴

¹ *Stone Cutters' Journal*, October, 1904, Supplement, pp. 13, 16, 17.

² *Stone Cutters' Journal*, April, 1905, pp. 8, 9.

³ *Constitution*, 1907, Art. XII, sec. 2.

⁴ *Stone Cutters' Journal*, January, 1913, p. 16; *Constitution*, 1913, Art. IV.

It is an open question whether training as a stonemason is valuable to a planerman. In some shops, handy-men at relatively low rates of wages are employed as planermen; in others, even where the union does not require it, stonemasons are employed on the machines and are paid stonemasons' wages. In the small shops some elasticity in the labor supply is gained by having a planerman who can also do hand cutting. The number of stonemasons employed as planermen would be much greater if the union had not opposed the introduction of the planer and attempted to limit its output. If the union had concentrated its energies on securing the employment of stonemasons as planermen, it would probably have carried its point. The effect of such a measure in lessening the displacement of stonemasons would have been very small, however, since the ratio of planermen to stonemasons in the country as a whole probably does not exceed 1 to 10.

IV

In the foregoing discussion of the machine policy of the stonemasons, attention has been directed at several points to certain difficulties in the enforcement of the rules growing out of the serious opposition in interest between the shipping and the receiving branches. But through a considerable part of the period from 1900 to the present the union has had to reckon also with the powerful opposition of the associated employers and with the "dual" unions of stonemasons created by them.

As noted above, the General Union has never been able to bring into affiliation all the local unions of stonemasons. When the planer question became important in 1900 there were independent unions in Chicago, New York, and Bedford, but these unions were not antagonistic to the General Union. As long as there was only one union in each city, whether independent or affiliated, the stonemasons in that city acted together. The attempt, first by certain independent local unions and later by the General Union, to restrict the use of the planer, quickly led to the establishment in a number of cities of "dual" unions of stonemasons.

The first city in which this occurred was Chicago. During the building-trades strike of 1900 the employers organized the

Independent Stone Cutters' Association. After the strike the Chicago association of cut-stone contractors employed only "independents," and in their agreement with this union it was provided that there should be "no restriction of the use of machinery or tools." In 1901 the old Chicago union applied to the General Union for a charter and this was granted; the aid of the General Union was then invoked against the "independents." In 1902 the old union published in the *Stone Cutters' Journal* a list of members of the new union, and asked other branches to "scab" these stonecutters. The "independents" were subjected to heavy fines if they wished to work in cities where the branches of the General Union were in control of stonemasonry. The old union also obtained the help of the Chicago Building Trades Council in preventing, as far as possible, the employment of "independents" in Chicago. The result of the constant warfare on the "independents" was to rouse in them a spirit of hatred to the General Union—a valuable asset to the employers when they later began to establish dual unions in other places.

The formation of a dual union in New York is directly traceable to the same cause. In September, 1904, a large group of the New York stone contractors organized an association, and demanded the removal of all restrictions on the use of machinery. The union refused to grant this demand and many of the employers began to disregard the union's rules. During the strike which followed, the contractors' association organized an independent union. The employers who were not members of the association, finding that the members of the association were able to operate their machinery free of restrictions, also demanded the removal of restrictions. The old union was too weak to refuse and reluctantly acceded. It then offered to concede the demands of the contractors' association, but that organization declared its firm intention of supporting the new union. In January, 1905, the members of the old union in large part unconditionally returned to work in the association shops.

In January, 1904, the National Cut Stone Contractors' Association had been formed. One of the purposes of the new organization was to protect its members against the stonecutters and

particularly against restrictions on the use of machinery. In Chicago, and later in New York, its members were closely allied with the dual stonecutters' unions; but in other cities the members of the association employed stonecutters who were members of branches of the General Union. At its second session, in November, 1904, the National Association decided to offer general resistance to all restrictions on the operation of the planers and on the shipment of stone. It adopted the following resolutions, which were to be posted in all the shops of its members: "First, that we shall run our machinery without restrictions as to hours or as to whom we shall employ to operate them; second, we shall cut and ship cut stone without any restrictions as to the place or local conditions." The adoption of these rules did not provoke a general conflict, chiefly because at the time the membership of the association was small. As it extended its influence, however, a series of engagements between the General Union and the association occurred.

As an aid in fighting the General Union, the association inspired the formation of a dual national union of stonecutters. In May, 1905, delegates from dual local unions of Pittsburgh, Chicago, and New York, together with delegates from Brooklyn, Newark, South Dover, Louisville, and Cincinnati, in which places independent unions were being formed, met in Pittsburgh and organized the National Stone Cutters' Society. The establishment of a rival national union which accepted the principle that there should be no restrictions on the use of machinery gave the employers an important advantage in combating the attempts which the General Union was making to bring about the amalgamation of the dual local unions with the branches. The local federations of labor and the building-trades councils were assisting the General Union in these efforts. Against this combination of forces the aid of a rival national union was important, since the officers of the new national union could carry on the opposition to the General Union much more effectively than the employers. It was the duty of these officers to be constantly on the alert to prevent the disintegration of the independent unions and to organize new local unions wherever the branches of the

General Union refused to submit to the two rules of the National Association.

In May, 1906, one of the contractors at Toronto refused to operate his newly installed planer according to the rules of the General Union. A strike resulted, and a number of members of the National Society from the New York branch took the places of the men on strike and a branch of the National Society was formed. Branches of the National Society were organized in the same year in Washington, Bedford, and Carthage, Missouri. In 1907 a branch was organized in Milwaukee. The same method was pursued in all these cases. Members of an existing branch of the National Society were sent to the city selected and after a lockout the members of the old branch were obliged to become National Society men or go to some other city for work. Here and there the branches of the old union were able after a time to bring about the amalgamation of the new union, but usually the contractors refused to deal with the amalgamated union and the branch of the society was re-established. Even where the amalgamation was permanent, the branch practically always was forced to give up all restrictions on the operation of the planer and on the shipment of cut stone.

After the repeal, in 1908, of the rules of the General Union relating to the planer and the shipment of cut stone, the efforts to bring about the amalgamation of the independent unions were increased. In September, 1909, the executive board of the General Union issued a proclamation offering amnesty and free admission to all members of the National Society. The American Federation of Labor and the Building Trades Department in November, 1909, declared the National Society an outlaw. The National Cut Stone Contractors' Association, on the other hand, at its convention in September, 1909, pledged its support to the National Society, and declared that after November 1 the contractors would employ only members of the society. In many of the cities where there were branches of the National Society this action immediately checked the amalgamation movement. In Bedford, however, a strike resulted. The strikers were vigorously supported by the General Union and the contractors by the National Association and by the

National Society. Workmen were brought in from places where there were branches of the society, and after a long and severe struggle the General Union acknowledged its defeat.

Despite the reverse at Bedford, the General Union continued its efforts to drive the independent unions out of existence. The most effective means of attack was to secure the aid of building-trades councils in boycotting all stone which had been cut by members of the National Society. The numerous strikes resulting from the attempts of the General Union to destroy the National Society led architects to fear that if they planned to use stone in a building its erection would be delayed by strikes. The National Cut Stone Contractors' Association felt that the continuance of the conflict would be injurious to the trade by diminishing the demand for stone. Since the restrictions on the operation of the planer and on the shipment of planer-cut stone were now entirely local and confined to a small number of places, the contractors were willing to end the long struggle if the General Union was ready definitely to agree to renounce for the future all restriction on planers. The officers of the General Union on their side were anxious to bring the costly conflict to an end. The members of the National Society were for the most part desirous of reaffiliating with the General Union, and of rehabilitating themselves as "good union men." Indeed, in some cities the hold of the National Society on its branches had grown very weak.

Under these circumstances the conclusion of an agreement was not difficult. In June, 1913, the officers of the General Union, of the National Society, and of the Contractors' Association concluded a treaty of peace. Members of the National Society were to be admitted to membership in the General Union. All questions arising in the future between members of the Contractors' Association and branches of the General Union were to be settled "without cessation of work" by "arbitration," and the General Union agreed to carry out all existing contracts between the National Society and the contractors. The General Union agreed to "waive the foremanships; all stone-working machinery; shipping of stone; penalizing of National Society cutters in any manner."

The agreement was attacked from two sides. The Chicago branch, embittered by the long struggle, was unwilling to admit to membership the National Society men in that city. Moreover, through the aid of the Building Trades Council, the Chicago branch had been gaining ground, and it strongly objected to having its victory snatched away; it was distinctly desirous of "penalizing National Society cutters." The agreement was also distasteful to those branches which had been able to maintain a local embargo on the shipment of planer-cut stone or to control the operation of planers. On the other hand, the branches of the General Union at Bedford, Toronto, and Milwaukee welcomed the amalgamation of the dual unions. They had long ago conceded all control over the shipment of stone and the working of the planer, and they saw in the union of all stonecutters the end of a costly feud and the promise in the near future of a substantial betterment in working conditions.

The opposition to the agreement was so strong, however, that the executive board of the General Union was convened in August, 1913. The board was not entirely satisfied with the agreement. In the first place, they desired that it should be made clear that the phrase "stone-working machinery" did not include pneumatic hammers, which were worked by stonecutters. They wished also to save to the branches which controlled the machines the right to continue to exercise such control. There was no objection on the part of the contractors to the control by the union of the air hammer, nor was there any strong objection to the continuance of control of the planer by certain local unions—notably San Francisco and St. Louis—since the Contractors' Association had no members in those cities. The union was willing to concede the shipment of stone into any branch from any other, and the Contractors' Association was willing to agree not to admit to membership contractors who were involved in any difficulty with a local branch. On this basis a supplementary agreement was made. The agreements between the General Union and the contractors are to continue in force until June, 1918.

V

It remains to be considered what effect the introduction of the planer has had on the wages, hours, and other working conditions of the stonemasons.

Table I, compiled from the report of the Bureau of Labor on "Wages and Hours of Labor, 1890 to 1907,"¹ shows the relative rates of wages paid from 1890 to 1907 to stonemasons and to certain other classes of workmen.

TABLE I

YEAR	RELATIVE WAGES PER HOUR			
	Stonecutters	Granite-Cutters	Marble and Stone Industry	Bricklayers
1890.....	100.5	102.8	98.5	98.4
1895.....	90.2	99.5	97.0	99.5
1900.....	100.4	108.1	104.9	106.5
1905.....	117.1	116.7	119.3	132.1
1907.....	120.8	126.5	125.7	140.9

The Bureau has not published its calculations of wages in the marble and stone industry for the years since 1907. The only data obtainable, therefore, are the statistics of union rates of wages as given in *Bulletin No 171* of the Bureau of Labor Statistics, from which Table II is compiled.

TABLE II

YEAR	RELATIVE RATES OF WAGES PER HOUR		
	Stonecutters	Granite-Cutters	Bricklayers
1907.....	93	90	93
1908.....	93	91	93
1909.....	93	92	93
1910.....	94	93	95
1911.....	94	93	95
1912.....	94	94	96
1913.....	96	99	98
1914.....	100	100	100

It may be concluded on the basis of these data that the wages of stonemasons have risen less since 1895 than those of

¹ *Bulletin of the Bureau of Labor No. 77*, pp. 66, 102, 103.

granite-cutters, whose trade is most nearly like that of the stonecutters, and much less rapidly than the wages of bricklayers, the most strongly organized of the building trades. The wages of stonecutters increased less from 1895 to 1907 than wages in the marble and stone industry taken as a whole. It is extremely doubtful, however, whether the introduction of the planer can be charged with entire responsibility for the slower increase. As we have shown above, the efforts of the union to restrict the use of the planer failed almost completely, but they resulted in evoking powerful opposition from the employers and in bringing into existence strong rival unions.

The stonecutters have also made a smaller reduction since 1890 in the number of working hours per week than the other groups, as is seen from Tables III and IV, also compiled from the bulletins of the Bureau of Labor and of the Bureau of Labor Statistics already cited.

TABLE III

YEAR	RELATIVE HOURS OF WORK PER WEEK OF		
	Stonecutters	Granite-Cutters	Bricklayers
1890.....	103.1	100.0	103.2
1895.....	100.2	99.9	100.0
1900.....	98.5	95.2	95.6
1905.....	95.8	92.6	92.0
1907.....	95.8	91.1	91.8

TABLE IV

YEAR	RELATIVE FULL-TIME HOURS OF WORK PER WEEK OF UNION		
	Stonecutters	Granite-Cutters	Bricklayers
1907.....	100	102	103
1908.....	100	102	103
1909.....	100	102	103
1910.....	100	101	101
1911.....	100	101	101
1912.....	100	101	101
1913.....	100	100	101
1914.....	100	100	100

The slower reduction in the hours per week was partly due to the fact that the full strength of the union could not be exerted on

account of the existence of the dual unions, but chiefly to the fact that the hours of stonecutters were already relatively short. In 1907 the average number of hours per week worked by stonecutters was 45.77; by granite-cutters, 47.97; by bricklayers, 46.62.¹

It is surprising that the wages and working hours of stonecutters were not more adversely affected by the introduction of the planer. In the face of an enormous displacement, a rival union, and a powerful employers' association, the stonecutters were able to make advances in wages and reductions in hours only slightly less than those of the granite-cutters, a well-organized trade. The explanation is to be found in the strong spirit of unionism in the trade. Although the stonecutters are loosely organized and frequently careless in maintaining their union affiliations, they have worked for many years under standardized conditions of employment. The maintenance of these conditions has become imperatively binding.

The stonecutters do not have a system of unemployment benefits and it is impossible to ascertain to what extent the introduction of the machine was accompanied by an increase of unemployment. The adjustment of the number of stonecutters to the diminishing needs of the trade has been easier than it otherwise would have been because of the method of recruiting the trade. A very considerable part of the stonecutters have always been immigrants who have come to this country after having already learned the trade. A decrease in the demand has had the natural effect of lessening the inflow. There is evidence, however, that unemployment, especially in recent years, has been very severe.

Besides the part it has had in displacement of workmen, the machine has been responsible for local dislocations by concentrating the stonecutting industry, to a considerable extent, near the quarries. A territorial redistribution of stonecutters has consequently been necessary. The mobility of the stonecutters is, however, very great, and they have been able by moving from place to place to avoid, to some extent, the unemployment which would otherwise have been involved in the changes of location of

¹ *Bulletin of the Bureau of Labor No. 77*, pp. 28.

the industry. As the number of workmen who can conveniently move their place of residence is limited, however, a number of local unions have attempted to retain at least a share of local work. The most important method of accomplishing this end has been to secure the aid of the bricklayers in enforcing a rule that jobs of less than 6,000 cubic feet must be cut locally. The stonecutters alone could not enforce such a rule, since the stone may be shipped in already cut, but if the bricklayers can be induced to refuse to set such stone, the rule can be enforced. The relations between the stonecutters and the bricklayers have been cordial since the stonecutters in 1912 relinquished the setting of stone to the bricklayers, and in some places the bricklayers have given the necessary aid. At a conference between the contractors and the stonecutters in September, 1915, the former contended that the 6,000-foot rules constituted a violation of the agreement between the two organizations, but the president of the stonecutters refused to give up these rules.

The introduction of the planer and other labor-saving devices has led everywhere to considerable changes in the character of stone contracting plants. The contractors have erected substantial buildings, equipped with hoisting and other devices. The sheds are usually larger, and, therefore, freer from dust, than formerly. Also, the seasonal fluctuations in employment have been reduced, because the more substantial sheds heated by steam have made winter work possible. These changes have been due to the necessity of investing large sums in machinery and the consequent desire to run the machines as nearly continuously as possible.

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